

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1: (Currently Amended) Polymer-based stopper, ~~characterized in that it incorporates~~ incorporating a composition or preblend based on volatile inhibitors which comprises an effective amount of at least one structuring agent consisting of a solid or pasty substance whose melting point is from 40 to 110°C, preferably from 50 to 90°C.

2. (Currently amended): Stopper according to claim 1, ~~characterized in that it incorporates~~ incorporating a composition or preblend comprising from 1 to 90%, preferably from 20 to 60% by weight of at least one volatile inhibitor and from 10 to 99%, preferably from 40 to 80%, of at least one structuring agent consisting of a solid or pasty substance whose melting point is from 40 to 110°C, preferably from 50 to 90°C.

3 (Currently amended): Stopper according to claim 1, ~~either of claims 1 and 2, characterized in that it incorporates~~ incorporating a composition or preblend whose solid or pasty structuring agent is ~~chosen~~ selected from the group ~~comprising~~ consisting of solid or pasty, aliphatic and/or resinous compounds with a low melting point of between 40 and 110°C, preferably between 50 and 90°C.

4. (Currently amended) Stopper according to claim 1, ~~one of claims 1 to 3, characterized in that it incorporates~~ incorporating a composition or preblend whose solid or pasty structuring agent is ~~chosen~~ selected from the group

~~comprising~~ consisting of mono- or polyfunctional aliphatic compounds which are linear and/or only slightly branched with hydrocarbon-based chains containing at least 10 carbon atoms.

5. (Currently amended) Stopper according to claim 4, ~~characterized in that it incorporates~~ incorporating a composition or preblend whose solid or pasty structuring agent is ~~chosen~~ selected from the group ~~comprising~~ consisting of:

- saturated or unsaturated, optionally oxidized mono- or dicarboxylic acids, their esters and their salts;
- phosphoric, sulfonic and phosphonic acids, their esters with alcohols and their alkali metals, alkaline earth metal, zinc, aluminium and/or organic amines salts;
- cyclic or acyclic compounds of the group consisting of lactones, ketones, aldehydes, amides and acetals;
- optionally polyalkoxylated, cyclic or acyclic, primary or secondary higher alcohols with a hydrocarbon-based chain containing at least 10 carbon atoms;
- linear and/or only slightly branched aliphatic hydrocarbons, in particular paraffins and isoparaffins;
- polyolefins and their copolymers with low molecular masses from 3000 to 20,000 g/mole;
- polyglycols, in particular polyethylene glycols of molecular mass of 2000 to 10,000 g/mole.

6. (Currently amended) Stopper according to claim 4, ~~characterized in that it incorporates~~ incorporating a composition or preblend whose structuring agent is ~~chosen~~ selected from the group ~~comprising~~ consisting of resinous compounds with a polymeric and/or cyclic structure and which can contain, in minor proportion, aromatic derivatives and cyclic terpenes.

7. (Currently amended) Stopper according to claim 1, ~~one of Claims 1 to 6, characterized in that it incorporates~~ incorporating a composition or preblend whose structuring agent is ~~chosen~~ selected from the group of those identified in Table A below, some of which are waxes of natural or synthetic origin:

TABLE A

Origin of structuring agent	Majority chemical nature of the structuring agent	Name of the structuring agent	Melting point (°C)	Density at 25°C ASTM D 1298	Penetration index at 25°C ASTM D1321
Natural	Ester (myricyl cirotate)	Carnauba	83-86	0.995	--
	Ester (myricyl palmitate)	Beeswax	62-65	0.955	--
Mineral	Paraffinic hydrocarbons (mixture)	Paraffin	50-60	0.900	15
	Isoparaffinic and naphthenic hydrocarbons	Micro-crystalline wax	69	0.930	29
	Aliphatic hydrocarbons (mixture)	Petrolatum	70-72	0.910/ 20°C	43-45

Synthetic	Polyethylene	Polyethylene wax	88	0.930	6.5
	Oxidized isoparaffinic hydrocarbons	Oxidized microcrystalline wax	85	--	13
	Phosphoric ester of C16/C18 fatty alcohols	-	83-89	0.998	--
	Polyethylene glycol	Polyethylene-glycol 4000	57-59	1.112/ 99°C	--

8. (Currently amended) Stopper according to ~~one of Claims 1 to 7, characterized in that it incorporates claim 1,~~ incorporating a composition or preblend comprising at least one volatile corrosion inhibitor ~~chosen~~ selected from the group ~~comprising~~ consisting of:

- nitrogenous derivatives and in particular firstly, aliphatic, aromatic, acyclic or cyclic amines including dicyclohexylamine, cyclohexylamine, morpholine, diisopropylamine and benzylamine, their organic salts including the benzoates, carbamates, laurates, caprylates and succinates, or their inorganic salts including the nitrites, nitrates, carbonates, phosphates and phosphites, and,

secondly, heterocycles including imidazole and its derivatives, triazoles and their derivatives, as well as hexamethylenetetramine,

- nitrogenous oxido derivatives including the alkali metal or alkaline-earth metal salts of nitrous acid, and
- benzoic derivatives of these metals such as sodium benzoate.

9. (Currently amended) Stopper according to claim 1 ~~one of Claims 1 to 8, characterized in that it consists~~ consisting of at least one polymer ~~which constitutes~~ representing at least 50% of its weight and which can be ~~chosen~~ selected from the group ~~comprising~~ consisting of:

- polyolefins including polyethylenes, polypropylene, polybutene and their copolymers with one or more unsaturated monomers including vinyl acetate, acrylic acid and its esters with carbon-based short chain alcohols,
- polyvinyl chloride and its copolymers, acrylic copolymers and their derivatives, and
- polyamides, polystyrenes, polycarbonates, polyesters, polyurethanes, rubbers including natural rubber, styrene-butadiene and polychloroprene.

10. (Currently amended) Stopper according to claim 1 ~~one of Claims 1 to 8, characterized in that~~ wherein it is incorporated by any suitable process including moulding, injection-moulding, extrusion or thermoforming.

11. (Currently amended) ~~Use of the stoppers according to one of claims 1 to 10~~ Process for protecting the internal parts of hollow metal components against corrosion, consisting in obstructing the opening of hollow metal components by introducing in the openings the stoppers according to claim 1.